



# Indiana State Department of Health

Epidemiology Resource Center

## Quick Facts

### **About....Antibiotic Use and Antibiotic Resistance**

#### **What are antibiotics?**

Antibiotics are powerful drugs that kill or stop germs from growing. Bacteria and viruses are two main types of germs. Antibiotics do not kill viruses such as; the common cold or influenza (the flu).

#### **How do antibiotics work?**

Antibiotics work by killing germs that cause infection or by keeping those germs from growing. Different antibiotics work for different germs. It is important to take antibiotics exactly as directed by your health care provider. If you take antibiotics when you do not need them, they lose their strength and ability to kill the germs causing your infection. The germs will become resistant to the antibiotic, and the next time you need antibiotics, they may not work.

#### **When do I need an antibiotic?**

Your health care provider will review your symptoms and any laboratory tests to prescribe the antibiotic that is right for you. Antibiotics do not cure viral infections, such as the common cold or the flu. The risk for viral infections can be reduced by avoiding close contact with others who are sick and proper hand washing (see Hand Washing Quick Facts).

#### **What is antibiotic resistance?**

Antibiotics can save lives but some germs get so strong that they find a way to fight the antibiotic and your illness won't go away. This is called antibiotic resistance. If you are infected with these resistant germs you will continue to be ill even though you are being treated with antibiotics. Illness caused by germs resistant to antibiotics can cause hospitalization, serious disability or even death. You can also spread these resistant germs to others. Germs can even pass on resistance to other germs.

## **Why should I be concerned about antibiotic resistance?**

Antibiotic resistance is a public health concern, because these resistant germs can spread from person to person or from objects used by someone who is infected. These germs then cause new infections that are harder to treat, last longer or impossible to cure. People infected may need more expensive, stronger medications and may need to be hospitalized for longer periods of time. Antibiotics should be used wisely to preserve their effectiveness. If germs become resistant to all current antibiotics there are no other alternatives.

## **What can I do to control the spread of resistant bacteria?**

Wash your hands properly to reduce the chance of getting sick and spreading infection. Repeated and improper use of antibiotics is the main reason germs become drug resistant. Proper use of antibiotics is extremely important:

- Do not take an antibiotic for a virus (cold or flu).
- Take the antibiotic exactly the way your health care provider says. Do not skip doses or stop taking the antibiotic. Take all doses even if you feel better.
- Do not save antibiotics for the next illness.
- Do not demand that your health care provider prescribe antibiotics when they are not needed. Ask what else you can do to relieve your symptoms.
- Do not take another person's antibiotic or share your antibiotic with someone else.

All information presented is intended for public use. For more information, please refer to:

Alliance for the Prudent Use of Antibiotics (APUA) at  
<http://www.tufts.edu/med/apua/>

Centers for Disease Control and Prevention (CDC)  
Get Smart: Know When Antibiotics Work campaign at  
<http://www.cdc.gov/getsmart/campaign-materials/about-campaign.html>

Indiana Coalition for Antibiotic Resistance Educational Strategies (ICARES) at  
[www.icares.org](http://www.icares.org)

This page was last reviewed June 15, 2015.